

CLAIMS

What is claimed is:

- 5 1. A system for use in delivering an inhibiting substance, comprising:
 a first part have a hollow portion containing an inhibiting substance;
 a second part being non-spherical, wherein the first
10 part is sealed with the second part defining a volume containing the inhibiting substance within the volume; and
 a plurality of stabilizing fins secured with an exterior of the second part.
- 15 2. The system of claim 1, wherein the second part comprises a body and a tail wherein the tail is secured with the body and the plurality of stabilizing fins are secured with an exterior of the tail.
- 20 3. The system of claim 2, wherein the body includes a hollow portion such that the volume is defined by the hollow portion of the body and the hollow portion of the first part such that the hollow portion of the body has a greater volume than a volume of the hollow portion of the first part.
- 25 4. The system of claim 3, wherein the second part has a length, the first part has a width, and the length of the second part is greater than the width of the first part.
- 30 5. The system of claim 4, further comprising

additional stabilizers extending along at least a portion of an exterior of the body.

6. The system of claim 1, where the second part is
5 reusable.

7. The system of claim 6, wherein the second part includes support structures.

10 8. The system of claim 1, wherein the plurality of fins are angled relative to an axis of the second part such that the angled fins provide a spin stabilizing effect.

15 9. The system of claim 1, wherein the plurality of fins are curved providing a spin stabilizing effect.

10 10. The system of claim 1, wherein the third part further comprises means for launching the first and second parts.

20 11. The system of claim 10, wherein the inhibiting substance comprises at least one capsaicinoid.

25 12. The system of claim 11, wherein the inhibiting substance comprises a synthetic Capsaicin.

30 13. A projectile system for use in delivering a substance to a target, comprising:
a projectile comprising:
a first part;

a second part that is at least partially hollow, wherein the second part is secured with the first part to seal the hollow portion defining a volume, wherein the projectile is non-spherical;

5 an inhibiting substance contained within the volume; and

stabilizing fins secured with the second part along an exterior of the second part; and

wherein the inhibiting substance is dispersed into a
10 cloud upon impact of the projectile with a target.

14. The projectile system of claim 13, wherein the first part is at least partially hollow where the hollow portion of the first part cooperates with the hollow portion of the
15 second part defining a volume such that the inhibiting substance is contained within the volume.

15. The projectile system of claim 14, wherein second part tapers to a smaller diameter away from the first part, and
20 the second part has a length that is greater than a width of the first part.

16. The projectile system of claim 15, further comprising:

25 additional stabilizers positioned on the exterior of the second part.

17. The projectile system of claim 15, wherein the first part is reusable and further comprises support structures.

18. The projectile system of claim 13, further comprising:

a shell;

an ignitable substance positioned within the shell,
5 wherein the ignitable substance propels the projectile from the shell upon ignition of the ignitable substance.

19. The projectile system of claim 18, further comprising:

10 a propulsion block positioned within the shell, wherein the projectile is positioned within the shell adjacent the propulsion block; and

the ignitable substance includes primer positioned within the shell such that the primer when ignited propels the
15 propulsion block which forces the projectile from the shell.

20. The projectile system of claim 19, wherein the inhibiting substance includes a capsaicin.

20 21. The projectile system of claim 13, further comprising:

a cartridge coupled with the second part wherein the cartridge includes means for launching the projectile.

25 22. The system of claim 21, wherein the first part is a generally non-frangible nose section.

23. The system of claim 13, further comprising:

a plurality of projectiles; and

30 a means for launching the plurality of projectiles.

24. The system of claim 23, wherein the means for launching launches at least a sub-set of the plurality of projectiles within a limited time to contact a target along a path across the target.

25. The system of claim 24, wherein the inhibiting substance includes a Capsaicin.

26. A system for delivering an inhibiting substance to a target, comprising:

a projectile having a hollow portion;

an inhibiting substances sealed within the hollow portion of the projectile; and

means for propelling the projectile towards a target, wherein the projectile radially disperses the inhibiting substance into a cloud about the target upon impact of the projectile.

27. The system of claim 26, wherein the projectile is secured with the means for propelling, and the means for propelling includes compressed gas.

28. The system of claim 27, wherein the projectile disconnects from the means for propelling as the compressed gas is released to propel the projectile.

29. The system of claim 26, further comprising:
a shell, wherein the projectile is positioned within the shell; and

the means for propelling comprises an ignitable substance positioned within the shell, wherein the ignitable substance propels the projectile from the shell upon ignition of the ignitable substance.

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30. The system of claim 29, wherein the ignitable substance comprises a primer.

31. The system of claim 29, wherein the ignitable
10 substance comprises only one or more primers.

32. The system of claim 29, further comprising:
a propulsion block positioned within the shell,
wherein the projectile is positioned within the shell adjacent
15 the propulsion block; and
the ignitable substance is positioned within the shell
such that when ignited the ignitable substance propels the
propulsion block which forces the projectile from the shell.

20 33. The system of claim 26, wherein the means for propelling comprises a caseless propellant.

34. The system of claim 33, wherein the caseless
propellant is ignitable.

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35. The system of claim 34, wherein the caseless propellant is substantially, completely consumed upon ignition and generates a propulsion force that is exerted on the projectile.

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36. The system of claim 26, wherein the projectile comprises a first part and a second part;

the first part having a plurality of fins secured with an exterior of the first part and having support structures;

5 the hollow portion being defined within at least the second part, wherein the second part is configured to rupture upon impact with the target to radially disperse the inhibiting substance.

10 37. The system of claim 26, wherein the inhibiting substance comprises a Capsaicin

38. The system of claim 37, wherein the inhibiting substance comprises a synthetic Capsaicin.

15 39. A method for delivering an inhibiting substance at a target, comprising:

directing a plurality of projectiles at a target along a generally vertical pattern, wherein the projectiles include a hollow volume containing an inhibiting substance; and

20 impacting the target along the generally vertical pattern with the plurality of projectiles such that the inhibiting substance is dispersed.

25 40. The method of claim 39, wherein the directing the plurality of projectiles along the generally vertical pattern includes initially directing at least one of the plurality of projectiles towards a lower portion of the target and directing later projectiles of the plurality of projectiles up along the target following the generally vertical pattern.

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41. The method of claim 39, wherein the impacting includes impacting the target with the plurality of the projectiles, wherein the plurality of the projectiles are
5 impacted with the target at locations on the target ranging from an inferior region of a torso of the target towards a superior region of the torso of the target inhibiting the target.

42. The method of claim 41, wherein the directing the
10 plurality of projectiles includes directing at least one of final projectiles of the plurality of projectiles towards a head of the target.

43. The method of claim 39, further comprising:
15 altering a path of an intended direction from the generally vertical path.

44. The method of claim 39, wherein directing the plurality of projectiles includes rapid firing the plurality of
20 projectiles from a rapid fire weapon to rapidly deliver the plurality of projectiles to the target.

45. A method of non-lethally inhibiting a living target using a projectile system comprising a projectile
25 containing a substance, the method comprising:
impacting the target with the projectile, such that the projectile ruptures;
radially dispersing the substance from the projectile on and about the target; and
30 contacting the target with the dispersing substance,

such that the target is inhibited thereby.

46. The method according to claim 45, wherein the step of impacting the target with the projectile comprises

5 contacting the anterior region of the target's torso; and

wherein the step of contacting the target with the dispersing substance comprises contacting the target's face with the substance.

10 47. The method according to claim 45, wherein the step of impacting the target with the projectile further comprises marking the target by impacting the target with sufficient force to bruise the target.

15 48. A method of non-lethally inhibiting a living target by firing, at the target, a projectile system comprising a projectile containing a substance, the method comprising impacting the target's torso with a plurality of projectiles, wherein, upon impact with the target, the projectiles rupture
20 and disperse their contents about the target and wherein the projectiles are impacted with the target in a vertical direction from the superior region of the target's torso down to the inferior region of the target's torso, such that the target hunches forward into the substance dispersing from the
25 projectiles.

49. A method of non-lethally inhibiting a living target by firing, at an object in proximity to the target, a projectile system comprising a projectile containing a
30 substance, the method comprising impacting the object in

proximity to the target with a plurality of projectiles, wherein, upon impact with the object, the projectiles rupture and disperse their contents about the target, such that the dispensing substance contacts the target's face region.

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50. A method of non-lethally inhibiting a living target located behind a glass-like barrier, the method comprising:

10 impacting the glass-like barrier with a projectile system comprising a frangible projectile, such that the projectile both fractures the glass-like barrier and ruptures; repeating the impacting of the glass-like barrier as necessary to result in a hole in the glass-like barrier through which additional projectile systems can be fired without rupture
15 of the projectiles;

firing at least one frangible projectile through the glass-like barrier, which frangible projectile comprises an inhibiting substance; and

20 impacting the frangible projectile with an object in proximity to the target, such that the frangible projectile ruptures and disperses the inhibiting substance about the target.

51. The method according to claim 50, wherein the
25 step of impacting the glass-like barrier with a frangible projectile comprises impacting the glass-like barrier with a frangible projectile containing a substance selected from the group consisting of solid substances and particulate substances, such that the substance facilitates fracture of the glass-like
30 barrier.